State the property that is illustrated in each statement. All variables represent real numbers.

38. $v(3t) = (3t)v$

39. $(25x)y = 25(xy)$

40. $4x + 13y = 13y + 4x$

41. $2.3 + x = x + 2.3$

42. $(2 + 3) + 5 = 2 + (3 + 5)$

43. $(3 + a) + b = 3 + (a + b)$

44. $x\left(\frac{1}{x}\right) = 1$, where $x \neq 0$

45. $\frac{x}{3} \cdot \frac{3}{x} = 1$, where $x \neq 0$

46. $-7 + 7 = 0$

47. $0 = 2x + (-2x)$

48. $1 \cdot (3x) = 3x$

49. $63 \cdot 1 = 63$

50. $-5x + 0 = -5x$

51. $x + y = 0 + x + y$

52. $m(x^2 + x) = mx^2 + mx$

53. $2(3 - y) = 2 \cdot 3 - 2y$

54. $4yw = 4wy$

55. $5(127) = 127(5)$

Evaluate each expression by using the order of operations.

56. $3 \cdot 2^2 + 3$

57. $6 \div 3 \cdot 2$

58. $2^2(2 + 3) + 5$

59. $6 \div (3 - 1) \cdot 5$

60. $-3 \cdot 5^2 + 16$

61. $5(2 - 3)^2$

62. $(3 - 2) + (5 - 4) - 2$

63. $30 - 3 \times 2 + 6 \div 3$

64. $16 \div 2 \times 6 - 1$

65. $(2^2 + 1) + 4 \div 2$

66. $6 \div 3 - (10 - 3^2)$

67. $2^{(3-1)} + (3 - 1)$

68. $3 \cdot 4 - 2^{(4-1)}$

69. $\frac{8-2}{3} + (2 + 1)$

70. $2 \cdot 4 + \frac{14}{5+2}$

71. Complete the following investigation:

a. Count the number of items in your home that display numbers.

b. What types of numbers are represented?

c. Name two examples of integers and two examples of rational numbers that you found.

CHALLENGE

72. Can a number be both rational and irrational? Explain your reasoning.

CONNECTION

73. STATISTICS While trying to find the average of 8, 10, 14, and 16, Ron entered 8 [+] 10 [+] 14 [+] 16 [÷] 4 [=] into a calculator anc got 36 for an answer.

a. Did Ron get the correct average of 8, 10, 14, and 16? Explain.

b. What keystrokes should Ron have used?

74. CULTURAL CONNECTION: ASIA Ancient Babylonians used rational numbers as approximations of irrational numbers. For example, the Babylonians knew that the diagonal of a square was $\sqrt{2}$ times the length of a side. For the value of $\sqrt{2}$, the Babylonians used 1.4142. They thought this value was close enough for their